

# *Fusinus malhaensis* sp. nov., a new species from Saya de Malha, Indian Ocean (Gastropoda: Fasciolariidae)

*Fusinus malhaensis* spec. nov., una nueva especie de Saya de Malha, Océano Índico (Gastropoda: Fasciolariidae)

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## ABSTRACT

*Fusinus malhaensis* sp. nov. is described from Saya de Malha Bank in the western Indian Ocean and compared to *F. colus* (Linnaeus, 1758), *F. longissimus* (Gmelin, 1791), *F. forceps* (Perry, 1811), *F. salisburyi* Fulton, 1930 and *F. multicarinatus* (Lamarck, 1822).

## RESUMEN

Se describe *Fusinus malhaensis* spec. nov. de Saya de Malha Bank en el oeste del Océano Índico y se compara con *F. colus* (Linnaeus, 1758), *F. longissimus* (Gmelin, 1791), *F. forceps* (Perry, 1811), *F. salisburyi* Fulton, 1930 y *F. multicarinatus* (Lamarck, 1822).

KEY WORDS: Gastropoda, Fasciolariidae, *Fusinus*, new taxon, Saya de Malha, Indian Ocean.

PALABRAS CLAVE: Gastropoda, Fasciolariidae, *Fusinus*, nuevo taxon, Saya de Malha, Oceano Índico.

## INTRODUCTION

*F. malhaensis* is one of the numerous new sea shell species collected by scientists and fishermen of the former USSR on the Saya de Malha Bank, a seamount which is

part of the Mascarene Ridge in the Western Indian Ocean ( $8^{\circ} 02' S - 12^{\circ} 00' S$ ,  $59^{\circ} 30' E - 62^{\circ} 30' E$ ). Five specimens are studied justifying the following description.

## SYSTEMATICS

Family FASCIOLARIIDAE Gray, 1853  
Genus *Fusinus* Rafinesque, 1815

Type species *Murex colus* Linnaeus, 1758 (by monotypy)

*Fusinus malhaensis* sp. nov. (Figs. 1-9)

Type material: Holotype : Muséum national d'Histoire naturelle (MNHN), Paris (149.8 x 42.3 mm), southwestern part of Saya de Malha Bank, collected by an Ukrainian fishing boat in 1992, 200-300

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m deep, dead collected, spire tip and tip of siphonal canal broken. (Figs. 1, 2). Paratype 1: Coll. Bondarev (141.0 mm), same data. Paratype 2: Coll. Hadorn (141.7 x 36.2 mm), same data, dead collected, spire tip broken. (Figs. 3, 4). Paratype 3: Coll. Fraussen (174.3 x 41.1 mm), same data, subadult, dead collected, spire tip broken. (Figs. 5, 6)

**Material examined:** The type material, and one dead collected specimen with same data (91.0 x 36.0 mm, coll. Hadorn), most probably a dwarf form (Figs. 7, 8).

**Etymology:** Named after the type locality Saya de Malha, derived from "Malha".

**Type locality:** 11° 46' S, 59° 33' E, southwestern part of Saya de Malha Bank, Mascarene Ridge, Indian Ocean, 200-300 m deep, on sandy silt.

**Description:** Shell large (91-175 mm), elongate, fusiform, conspicuously thin, light in weight, spire high, siphonal canal long, straight. Protoconch and spire tip broken in all available specimens, leaving 9 remaining whorls. Original number of teleoconch whorls 11 or 12 by estimation.

Upper whorls rounded, middle whorls with peripheral keel, lower whorls with small pointed knobs. Suture deeply incised, shoulder slope straight or convex.

Upper whorls with 7 or 8 narrow, rounded axial ribs extending from suture to suture. Interspaces weakly impressed, about as broad as ribs. On following whorls 7-10 axial ribs, withdrawing from both sutures and gradually transforming in small pointed knobs. 7-11 knobs on penultimate and 8-12 on body whorl.

Spiral sculpture consisting of conspicuously fine spiral cords and fine intercalated threads. 5 or 6 primary cords on uppermost remaining whorls. On following whorls, a secondary thread appears between primary cords, becoming as strong as primary ones on next whorls. On following whorls, fine intercalated tertiary threads between primary and secondary ones. Their number increasing by intercalation to up to 6 on latter whorls. Primary and secondary cords becoming weaker and tertiary threads becoming slightly stronger, sometimes from penultimate whorl on. Finally, all spirals have about the same strength on body whorl. Primary cord at periphery forming the strongest cord of carinated whorls. Spiral sculpture crossed by fine growth lines, giving the surface a uniform, minutely granulated appearance.

Aperture ovate, white. Outer lip simple, slightly crenulated with numerous rather strong, close-set internal lirae. Parietal callus strongly developed, outer edge free and detached from lower part of body whorl, surface of callus smooth or with some weak irregular folds. Columellar folds absent.

Siphonal canal conspicuously long, slender, straight. Outer side ornamented with weak spirals on upper half of siphonal canal, lower half almost smooth.

Uniformly white, one specimen (dwarf form) with brown coloured axial knobs. Periostracum, operculum and radula unknown.

**Range and habitat:** Only known from the type locality, 200-300 m deep on sandy silt. Probably endemic.

**Discussion:** Little is known about this striking species because only five dead collected specimens without protoconch, periostracum and animal have been collected. However, the shell of *F. malhaensis* is conchologically characteristic for *Fusinus* s.s. and similar to the type species *F. colus* (Linnaeus, 1758).

*F. malhaensis* is easily recognizable and characterized by the conspicuously fine spiral sculpture, the large, elongate and light-weight shell, by the straight or clearly convex shoulder slope, and by the unicarinated lower whorls.

*F. colus* differs in having a stronger spiral sculpture with a smaller number of spirals, a less constricted suture, usually a smaller adult size, a thicker shell, white axial ribs with brown-coloured interspaces at least on upper whorls, and often a red-brown tinged spire and siphonal canal.

*F. longissimus* (Gmelin, 1791) can be distinguished by the stronger spiral sculpture, the smaller number of spiral



Figures 1-9. *Fusinus malhaensis* sp. nov., Saya de Malha Bank, 200-300 m deep. 1, 2: holotype MNHN, 149.8 mm; 3, 4: paratype 2, coll. Hadorn, 141.7 mm; 5, 6: paratype 3, coll. Fraussen, 174.3 mm; 7, 8: coll. Hadorn, 91 mm, dwarf form; 9: detail of shell sculpture on penultimate whorl.  
Figuras 1-9. *Fusinus malhaensis* sp. nov., Saya de Malha Bank, 200-300 m de profundidad. 1, 2: holotipo MNHN, 149,8 mm; 3, 4: paratípico 2, coll. Hadorn, 141,7 mm; 5, 6: paratípico 3, coll. Fraussen, 174,3 mm; 7, 8: coll. Hadorn, 91 mm, forma enana; 9: detalle de la escultura de la concha en la penúltima vuelta.

cords, the less constricted suture, the clearly heavier and thicker shell, the usually straight or concave shoulder slope and by the darker coloured interspaces between the axial ribs on upper whorls.

*F. forceps* (Perry, 1811) and *F. salisburyi* Fulton, 1930 have both a conspicuously strong spiral sculpture, a clearly smaller number of spiral cords, a slightly channeled suture, a broader

spire angle, a stronger and broader siphonal canal, and finally a thicker and heavier shell. Moreover, *F. forceps* has unkeeled whorls.

*F. multicarinatus* (Lamarck, 1822) from Somalia has a broader spire angle, ventricose whorls, a heavier and thicker shell, a stronger spiral sculpture, less numerous spirals, a less constricted suture, and a broader and shorter siphonal canal.

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